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Achieving Adequate United States Maritime Capital in an Era of Declining Resources

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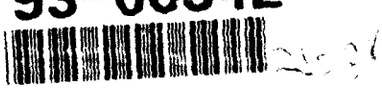

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Throughout its history, the United States has been a nation not given to conscious recognition of the importance of maritime affairs. This fact notwithstanding, in the post-Cold War world, we remain a nation dependent on the seas and maritime capital for commerce, defense and links to overseas allies. Geography is our most important constant. With no current likelihood of global war, strategic emphasis in this uncertain world is shifting from global containment and warfighting to a global stability strategy with regional defense and economic focus.

The domestic Shipbuilding and Repair Industry, Department of Commerce Standard Industrial Classification (SIC) 3731, is in long term decline and may not have adequate capacity for construction, repair or strategic reconstitution of the nation's naval or cargo vessel needs.

Recent public debate has been focused on salvaging the future of the private U.S. flag cargo fleet within the framework of existing 50 year-old legislation and government subsidies.

This paper explores the multi-dimensional and uniquely American nature of our maritime dilemma and recommends a strategic maritime goal for the next century.

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This paper explores the multi-dimensional and uniquely American nature of our maritime dilemma and recommends a strategic maritime goal for the next century.

I. Introduction

The United States touts itself a maritime nation and has conducted its international affairs as a state dependent on the sea for most of the twentieth century. At the turn of the century, Alfred Thayer Mahan and Theodore Roosevelt understood the maritime imperatives thrust upon us as an emerging great power. The modern United States Naval Academy and both the National and Naval War Colleges were founded during this exciting period of American strategic expansion. Indeed, sea power and modern great power status are inextricably linked.

It is difficult to assess the nature of the image which the words "sea power" create in the mind of the typical American citizen. Mahan said of the United States in 1890:

> "As for a seafaring population adequate to her possible needs, where is it? Such a resource, proportionate to her coastline and population, is to be found only in the national merchant shipping and its related industries, which at present scarcely exist."[1]

The American people and the news media have never taken the time to learn what sea power is or how it works to support our way of life. It is a matter very much connected with the sea, and has a very specialized character on that account, just as Mahan said would be the case. And there's the rub. The great expounder of sea power was the first to comprehend that most people, and most Americans in

particular, really do not understand maritime affairs, including the functions and uses of ships and navies. The meaning of sea power has been lost, to a very large degree, on a nation with a cyclic tradition of isolation and a population little given to seafaring, especially in an era of declining domestic and international expectations.

The purpose of this paper is to explore the multi-dimensional and uniquely American nature of our maritime dilemma and to recommend a strategic maritime goal for the next century.

President Roosevelt was facing this dilemma on 27 June 1907, during a war scare with Japan, when he ordered the first global deployment of the newly rebuilt United States Navy for the "...prime purpose of impressing the American people...", thereby bringing pressure on Congress to continue supporting a strategic, modern naval shipbuilding program.[2]

Our maritime capital has never been treated as a coherent system. The American people have never demanded structured legislative support of our maritime capital as a critical industry other than erratic, typically emergency compliance with the constitutional imperative for Congress "To provide and maintain a Navy".[3] We have historically depended on the executive to articulate strategic naval and commercial maritime policy during national emergencies while the lawmakers have confined themselves largely to micro tax and subsidy issues after the fact. Clear

lines of authority and responsibility are lacking as the Departments of State, Defense, Commerce, Transportation and Treasury vie with Congress to administer our overly complex maritime affairs.

Although U.S. naval supremacy is unchallenged, commercial maritime conditions today are strikingly similar to those at the turn of the century. Once again, U.S. shipyards are not able to meet the prices offered by overseas competition and American shipowners cannot pay U.S. ship prices or U.S. crew wages and still offer competitive freight rates on the world market. A large flag-of-convenience fleet exists once more.[4]

The current state of the shipbuilding industry in the United States should convey a sense of strategic concern, not alarm. Industrial capacity is significant and afloat inventories are modestly adequate for military needs. It is the prolonged negative commercial trend that is disturbing. Our shipbuilding industry is deteriorating. We the people cannot afford to ruin through politics, mismanagement and sheer ignorance what is left of our Navy, ocean shipping industry and their supporting industrial base. The industry is not economically viable in the global market. We sense there is a problem. It is certainly not unprecedented. What, if anything, should we do about it?

The multi-dimensional and uniquely American nature of our maritime dilemma has already been discussed. Principles of Total Quality Management (TQM), a system of cooperative leadership, will be introduced later to help build the framework of a strategic

maritime process for the next century.

Short descriptions of the SIC 3731 industrial base and our afloat naval and merchant inventory will follow. The economic, military and political imperatives which dictate our continued involvement in global maritime affairs will be explored and recent policies will be discussed.

> "The tendency to trade, involving of necessity the production of something to trade with, is the national characteristic most important to the development of sea power."[5]

II. A Short Introduction to the Shipbuilding and Repair Industry (SIC 3731)

A. Structure

According to the U.S. Industrial Outlook 1992, the primary sector of the first-tier shipyards, those capable of constructing, drydocking and repairing vessels over 400 feet in length, number 16 Active Shipbuilding Base (ASB) shipyards as of 01 October 1991. These yards are all privately owned and are actively seeking contracts for vessels over 1,000 gross tons.[6] The three largest shipyards (Ingalls Shipbuilding, Electric Boat and Newport News Shipbuilding and Drydock) are all subsidiaries or divisions of very large diversified corporations. Shipbuilding constitutes less than 25 percent of parent corporate revenue for these large firms.[7]

The best description of the new ship construction industry is a multilateral monopsony with one buyer and several sellers. However, some segments of production, such as attack aircraft

carriers, are bilateral monopolies with one buyer and one seller. Nuclear submarine construction is approaching this state. The industry is highly concentrated with strong barriers to entry.

The government provides significant direct support to the industry. Virtually all recent new construction has been reserved under federal law and contracted through the Naval Sea Systems Command, Military Sealift Command, Army Corps of Engineers, U.S. Coast Guard, National Oceanic and Atmospheric Administration, National Science Foundation and the Maritime Administration. The U.S. was 27th in the world in commercial merchant shipbuilding in 1991 with no new orders and only seven-tenths of one percent of the world gross tonnage on order.[8]

There are nine government owned yards which engage in the overhaul and repair of only Navy and Coast Guard ships. (Not included in figures below)

Some shipbuilding and repair numbers:

-Total Work Force 95,000(about) declining[9]

-Ships Under Construction 80 + declining[10]

-Total USN Shipbuilding and Repair Budget FY 1992 (requested) $11,994,000,000 declining[11].

Naval vessels are complex, government specifications and regulations are extensive, and a specialized administrative management team is required to stay in business beyond the first hull. However, the ship repair business is thriving and entry barriers are much lower.

B. Conduct

Profit maximizing behavior by shipbuilders is effectively held in check. The buyer (government) has historically insisted on profit control through a number of contracting devices and regulations which control price. Government/industry relations have not been cooperative. Return on investment is below average.

The apparent negative implications for capital investment to improve facilities and competitive position are obvious, but have not been borne out in practice since 1985. For example, in FY 1991 the industry invested more than $228 million to upgrade facilities, although $91 million was forecast. The figure for 1992 is forecast at $129 million.[12] The industry is attempting to introduce modular techniques in spite of relatively low profitability.

Shipbuilding labor is highly unstable. For example, there is an annual turnover of approximately 75 percent of the labor force. After receiving training, workers leave for private sector construction jobs.[13]

C. Performance

Although unable to compete in the global commercial market with modern, subsidized foreign shipyards, the shipbuilding industry has been enjoying the largest peacetime naval construction program in U.S. history. Federal outlays will be reduced about ten percent through FY 1993 and as a result of DOD budget reductions, the Navy has cut in half its planned buy of ships through FY 1997 when the fleet will reach about 450 vessels. The near-term outlook is stable with a sharp decline in government sales predicted as the

1980's building program tails off later in the decade.[14]

III. The Afloat Inventory

A. Naval Forces

The United States Navy is downsizing from 550 to about 450 ships over the next five years. This "Balanced Force", as Admiral Frank B. Kelso, the Chief of Naval Operations (CNO) called it, must be able to meet three criteria:

1. It must be capable of implementing U.S. national security strategy.

2. It must be able to maintain a realistic readiness and response capability (forward deployed, high training readiness, first class technology).

3. It must be sustained in a way which permits our sailors a realistic quality of life (sea/shore rotation, etc.).[15]

This future force will be built around 12 carrier battle groups and will be manned by approximately 510,000 sailors.[16] The Balanced Force must above all be affordable.[17] That is, one billion dollar destroyers and two billion dollar submarines are unacceptable politically and economically. The post cold war demand for naval vessels is gradually declining. In fact, some observers point out that under the current six-year defense plan, the Navy will procure less than enough ships to sustain a 300 ship Navy over the long term.[18]

Other government agencies such as the Coast Guard are in the shipbuilding market for a small number of specialty and scientific

vessels.

B. Other U.S. Flag Cargo Vessels

This category of our afloat inventory is the heart of the matter and more difficult to understand because the multi-department laws and regulations governing procurement, ownership, manning, operation and repair are complex. These vessels are of many types of varying degrees of military utility, age, speed and state or repair. Manning with American crews is increasingly difficult. However, we depend on these vessels to move the vast majority of wartime materiel.

The nomenclature used in official documents is inconsistent and vague. For example, the following terms were used on one page of a 1989 presidential commission final report recommending action to the President:

"merchant ships, commercial merchant marine, inactive reserve forces, reserve sealift forces, specialized ships, shipping capability, sealift resources, strategic and economic sealift, merchant marine, United States flag merchant marine,"...and so on[19]

There are other terms such as fast sealift, prepositioning ships and charter used in this fragmented national dialogue.

As was discussed in the introduction, we have historically had a problem with a consistent approach to maritime affairs. The issue is further complicated by political direction for maritime affairs to be competitive, efficient and economically viable.

The central issue is "Sealift", a term which has a special

meaning when used in discussions of national strategy.

DEFINITION

> Sealift: is the shipping capacity for strategic movement to deploy and sustain our armed forces in a period of national emergency or war.[20]

The national inventory of vessels which supports this strategic mission is most commonly grouped in the official literature as follows:

1. The U.S. flag fleet.
2. Navy Department Military Sealift Command vessels.
3. The Ready Reserve Force.
4. Vessels under effective U.S. control.

It should be noted that there is no category called "merchant marine". Also, militarily useful cargo ships are not necessarily commercially viable.

I believe that this is the heart of the controversy. The Merchant Marine Act of 1936 established, as national policy, the requirement to have a merchant marine "capable of serving as a naval and military auxiliary in time of war or national emergency."[21] It linked national defense with commercial ocean shipping.

Title I of the Merchant Marine Act of 1936 cites the national defense as a compelling reason for having a merchant marine.[22] The ideal that this merchant marine was to be "commercially viable" was added later by politicians and maritime administrators. We attempted to create via legislation that which did not naturally

exist as an American institution. The result was defacto nationalization of the shipbuilding, repair and ocean shipping industries with a consequent disastrous effect on competitive, free market practices.

IV. The National Security Sealift Policy

The President outlined a new national security strategy for the United States in his 2 August, 1990, speech at the Aspen Institute where he stated that future U.S. defense policy will be based on four major elements: Deterrence, Forward Presence, Crisis Response and Force Reconstitution.[23] The President perceived a shift from the policy of containment to a strategy of maintaining global stability with a regional focus. Stability means a "world safe for economic prosperity and peaceful, evolutionary, democratic change."[24]

Previous to this, the President had approved a National Security Sealift Policy on 5 October 1989. Sealift was characterized as "essential" to our forward deployed defense strategy and to maintaining a wartime economy. The Department of Defense was tasked with defining the requirements for "sealift of deploying forces, follow-on supply and sustainment, shipbuilding and ship repair".[25] The definition of strategic mobility (sealift) as a mission had begun to focus in the Department of Defense.

In his 14 February, 1991, posture statement to Congress,[26] Admiral Kelso discussed the maritime structure necessary to support

the President's new security strategy. He reviewed the history of just completed Operation Desert Shield as a modern power projection case study, and most importantly, he stressed the indispensable character of maritime superiority and sealift's part in it. The Navy's classic three missions of sea control, power projection and strategic deterrence were augmented with a fourth, strategic sealift, by then Secretary of the Navy John Lehman in 1984.

Admiral Kelso referred to sealift and afloat prepositioning as "absolutely vital to sustained power projection operations". He also noted that there was an ongoing Congressionally Mandated Mobility Study of airlift, sealift, prepositioning and amphibious lift requirements.[27] Once again, sealift as a definitive mission was the center of the discussion. The merchant marine and its commercial viability were not mentioned.

Reconstitution, the ability to surge to meet a global threat given 24 months strategic warning[28], was also recognized by the CNO as a strategic imperative. "We must maintain an adequate industrial base...and adequate shore infrastructure for surge capacity..."[29] The tolerance for some excess capacity was implied.

As recently as November, 1991, the Department of Defense reported optimistically to Congress in spite of negative industry trends:

"Despite these trends, an adequate industrial base is now in place to support DOD demands, and oversight of the sector will continue to ensure critical capabilities are maintained."[30]

Is there an inconsistency here? No, because the President's

October, 1989 policy only directed the commercial industry to participate "to the extent it is capable...to be augmented during crisis and war by reserve fleets comprised of ships with national defense features",[31] effectively distancing strategic sealift from the intractable economically viable merchant marine issue.

The linkage established by President Franklin Roosevelt between national security and the merchant marine in 1936 had become strained to the breaking point.

The Congressionally Mandated Mobility Requirements Study (MRS) started reporting 24 January, 1992, and provided an unclassified executive summary.[32] The report is not complete; however, it appears that the intention is to institutionalize the strategic sealift mission under the aegis of the Department of Defense as a joint mobility resource if Congress will enact the language.

The most striking request in the study appears to be for language to establish a "Sealift Fund" in the FY 1992 Defense Bill. The fund would receive the previously appropriated $1.875 billion plus the $1.2 billion to be requested for FY 1993. The fund will provide the resources to construct, convert and purchase the required sealift.[33]

The division of sealift responsibility within DOD is not yet clear and DOD's relationship with the other executive departments having maritime responsibilities has yet to be revealed. The establishment of the Sealift Fund will succor to some degree our hard pressed domestic yards, but how much of the money will be spent domestically is not clear. Conversion,

purchase and charter of 20 large roll-on/roll-off ships and increasing the Ready Reserve Force from 96 to 142 vessels quickly will probably require foreign purchases.[34] Congressional support of this proposal remains to be seen.

V. A Process Discussion

"Sadly, the belief has grown, nurtured by politicians, that business is not about cooperation but rather about competition and conflict: competition between companies, competition between departments in the company, competition between individuals, conflict with suppliers."[35]

When Dr. W. Edwards Deming wrote his seminal Out of the Crisis in 1982, he might have had America's shipbuilding and repair industry in mind. It is a case study of an industry in trouble, an industry in need of radical transformation from the destructive ways of the past. It is noteworthy that Admiral Kelso has adopted a version of Deming's 14 Points which he calls Total Quality Leadership and has committed the senior leadership of the Navy to it.[36]

"The need for transformation of governmental relations with industry is also necessary, as will be obvious."[37]

Of the original 14 Points, those which are most germane to the shipbuilding industry crisis are:

1. Create constancy of purpose toward improvement of product

and service, with the aim to become competitive and stay in business, and to provide jobs. (Outdated strategies)

4. End the practice of awarding business on the basis of price tag. Instead, minimize total cost. Move toward a single supplier for any one item, on a long-term relationship of loyalty and trust. (Failures of cooperation)

7. Institute leadership... (Technological weaknesses in development and production)

8. Drive out fear... (Neglect of human resources)

9. Break down barriers... (Government and industry working at cross purposes)

11b. Eliminate management by objective... (Short time horizon)[38]

In my opinion, the most serious obstacle to shipbuilding industry improvement is the adversarial relationship which exists between government and industry. The negative cumulative effect of years of incoherent legislation, the DOD budget process, over regulation, special consideration for maritime unions, etc. has been to bring the industry gradually to its knees.

We lack a coherent industrial policy that is directly linked to national security strategy. As laudable as the Mobility Study appears to be, it is only documenting the symptoms of a larger problem. The problems cannot be solved in an industry that is effectively nationalized.

Congress must cooperate.

VI. Conclusions and Recommendations

The beginning of the story was our historic lack of appreciation of maritime affairs. Operation Desert Shield/Storm notwithstanding, we remain generally ignorant of maritime affairs, although our awareness of the importance of strategic sealift as a DOD mission has momentarily improved.

In my opinion, the existing shipbuilding and repair industrial base is adequate to meet our current and projected naval, strategic sealift and specialty vessel needs. This assumes that we may procure strategic cargo capacity on the international market if necessary. In my opinion, the state of general cargo vessel production is not a problem linked to government vessel production. We will continue to take appropriate action to maintain government vessel production regardless of the health of cargo vessel sales.

Whether commercial cargo vessel production gains an internationally competitive stance is a separate question depending almost entirely on revolutionary change in government/industry relations. Government must withdraw from counterproductive oversight practices. The current system of law, regulation and policy cannot provide a healthy commercial environment. An atmosphere of healthy cooperation must be fostered.

It should be officially acknowledged by the White House, Congress, Department of Defense, Department of Commerce and the

Maritime Administration that a merchant marine does not exist as a meaningful defense asset or national institution. The Merchant Marine Act of 1936 has failed. As a result, the Department of Defense is gradually assuming the responsibility for strategic sealift to support our joint mobility plans. The Maritime Administration should be disestablished.

A process revolution is also needed for government sponsored shipbuilding. This process revolution must include elimination or modification of all government sponsored legal and organizational impediments to cooperative shipbuilding. Long-term government commitments and timely rewarding of contractors are required if they are to produce high quality,low cost ships.

The goal of the United States by the year 2000 must be to maintain sufficient capacity to domestically construct and repair the naval, strategic sealift and government specialty vessels required to resource the Base Force and support our national security strategy. In order to accomplish this goal, the entire 50 year-old current process must be ended before it destroys what is left of the industry.

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